DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONSTRUCTION PERMIT

Permit No. 082CP05 Final: September 25, 2003
Application Number X-39

The Department of Environmental Conservation (the Department), under the authority of AS 46.14 and 18 AAC 50, issues a construction permit to the Permittee, **Alyeska Pipeline Service Company.** The permit **revises terms and conditions of AQC Permit to Operate No. 9671-AA001** for the **Valdez Marine Terminal of the Trans-Alaska Pipeline System.**

This permit satisfies the obligation of the owner and operator to obtain a construction permit as set out in AS 46.14.130(a).

As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this construction permit.

As set out in 18 AAC 50.340(i), this construction permit revises terms and conditions of Air Quality Control Permit to Operate No. 9671-AA001, dated June 7, 1996.

[18 AAC 50.320(b), 1/18/97]

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John F. Kuterbach, Manager
Air Permits Program

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Section 1 List of Abbreviations Used in this Permit

AAC ..... Alaska Administrative Code
AQC ..... Air Quality Control
ADEC.....Alaska Department of Environmental Conservation
AS ..... Alaska Statutes
ASTM .....American Society for Testing and Materials
CEMS.....Continuous Emission Monitoring System
C.F.R. ..... Code of Federal Regulations
CO .....Carbon Monoxide
COMS .....Continuous Opacity Monitoring System
dscf.....Dry standard cubic feet
EPA ..... US Environmental Protection Agency
gr/dscf ..... grain per dry standard cubic feet (1 pound = 7000 grains)
GPH.....gallons per hour
HAPS .....Hazardous Air Pollutants
..... [hazardous air contaminants as defined in AS 46.14.990(14)]
H_2S ..... Hydrogen Sulfide
HHV ..... Higher heating value
ID ..... Source Identification Number
kW..... kilowatts
MACT .....Maximum Achievable Control Technology
Mlb.....thousand pounds
MMBtu.....dscf x HHV
NAICS .....North American Industry Classification System
NESHAPs ..... Federal National Emission Standards for Hazardous Air Pollutants
..... [as defined in 40 CFR 61]
NSPS..... Federal New Source Performance Standards [as defined in 40 CFR 60]
NO_x .....Oxides of Nitrogen
PPM..... Parts per million
PPMV..... Parts per million volume
PS .....Performance specification
PSD ..... Prevention of Significant Deterioration
RM ..... Reference Method
SIC ..... Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPH.....Tons per hour
TPY .....Tons per year
VOC .....volatile organic compound [as defined in 18 AAC 50.990(103)]
Wt% ..... weight percent

Section 2 Identification

Names and Addresses

Names and Addresses

Permittee:	Alyeska Pipeline Service Company 1835 South Bragaw Street Anchorage, AK 99512
Facility Name:	Valdez Marine Terminal of the Trans-Alaska Pipeline System
Location:	Sections 17-20, T9S, R6W, and Section 13, T9S, R7W Copper River Meridian, Alaska
Physical Address:	At the West End of Dayville Road Valdez, Alaska
Owner:	Owners of the Tran-Alaska Pipeline System
Operator:	Alyeska Pipeline Service Company 1835 South Bragaw Street Anchorage, AK 99512
Permittee's Responsible Official	Rod Hanson, Terminal Manager
Designated Agent:	CT Corporation 801 West Tenth Street, Suite 300 Juneau, AK 99801
Facility and Building Contact:	Bradley C. Thomas Senior Environmental Engineer (907) 787-8806 thomasb2@alyeska-pipeline.com
Fee Contact:	Tammy Martin P.O. Box 60469 Fairbanks, AK 99706

Facility Process Description

SIC Code of the Facility: 4491 - Marine Cargo Handling

[18 AAC 50.320(a), 1/18/97]

Section 3 Emission Information and Classification

Emissions of Regulated Air Contaminants, as provided in Permittee's application:

Nitrogen Oxides, Carbon Monoxide, Sulfur Dioxide, Particulate Matter (less than 10 microns), Volatile Organic Compounds, p-Xylenes, 1,3-Butadiene, Acrolein, Asbestos m-Xylenes, Toluene, Phenol, Xylenes (isomers and mixture), Formaldehyde, 2,2,4-Trimethylpentane, Benzene, Cumene, Acetaldehyde, Naphthalene, o-Xylenes, Ethylene Glycol, Hexane (as n-Hexane), Polycyclic Organic Matter, Carbonyl Disulfide, Arsenic, Beryllium, Chromium Compounds, Cobalt Compounds, Lead, Mercury, Halon, Freon, Reduced Sulfur Compounds, Hydrogen Sulfide, Methanol, Ethylbenzene, and Glycol Ethers.

Construction Permit Classifications:

Note: Facility Classifications are described under 18 AAC 50.300(b) through (g), modification classifications are described under 18 AAC 50.300(h), and owner requested limits are described under 305(a)(1) through (4).

Facility Classifications:

(1) 18 AAC 50.300(b)(2)

(2) 18 AAC 50.300(c)(1) & (c)(2)

(3) 18 AAC 50.300(f)

Owner Requested Limit Classification

The Revisions to terms and conditions of AQC Permit No. 9671-AA001 require a construction permit because:

a. The facility is classified as:

   i. an Ambient Air Quality Facility under 18 AAC 50.300(b)(2), as the facility contains sources with a rated capacity of 100 MM Btu/hr or more, and

   ii. a Prevention of Significant Deterioration (PSD) Major Facility under 18 AAC 50.300(c)(2)(W), as the facility has a potential to emit more than 100 tons per year of regulated air contaminants and has a petroleum storage and transfer unit with a total storage capacity exceeding 300,000 barrels; and

b. The Permittee has requested that certain permit terms and conditions of Permit No. 9671-AA001 be revised under 18 AAC 50.305(a)(3).

[18 AAC 50.320(a)(2), 1/18/97]

Section 4 Permit Continuity

1. Except as revised or rescinded herein or as superseded by an Air Quality Permit issued under AS 46.14.170, the Permittee shall comply with terms and conditions of Air Quality Control Permit to Operate No. 9671-AA001, issued June 7, 1996.

2. If permit terms and conditions listed in this permit conflict with those of Permit No. 9671-AA001, issued June 7, 1996, the Permittee shall comply with terms and conditions listed herein.

[18 AAC 50.340(i), 1/18/97]

Revisions to AQC Permit No. 9671-AA001

3. Conditions 10, 12, 14, 16 and 23 are deleted from AQC Permit No. 9671-AA001 on the effective date of this permit.

4. Conditions 11, 25, 26, 27, Exhibit B, Exhibit C and Exhibit D from AQC Permit No. 9671-AA001 are revised as follows on the effective date of this permit:

Revised Condition 11

11. Permittee shall collect working loss and breathing loss vapors from the crude oil storage tanks identified as Source No. 17 through 34 in Exhibit A, and combust those vapors in either the power boilers or the waste gas incinerators (source no. 1-6 in Exhibit A).

Revised Condition 25

25. Until the Department approves an ambient impact analysis demonstrating that maximum cumulative 3-hour sulfur dioxide impact is less than 780 $\mu g/m^3$ at the vicinity of the VMT, conduct a fuel oil bunker sulfur analysis of a representative sample of diesel engine/boiler fuel oil from each crude oil tanker each time it berths at the facility. Submit to the Department in the Facility Operating report, a tabulation of the results of all such tests, by tanker name.

Revised Condition 26 and Condition 27

26. Excess Emissions and Permit Deviation Reports.

26.1 Except as provided in condition 27, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commenced or is discovered, report

(i) emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable;

(iii) excess tanker vessel opacity.

b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in conditions 26.1c(ii)and 26.1c(iii);

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the Department provides written permission to report under condition 26; and

(iii) for failure to monitor, as required in other applicable conditions of this permit.

26.2 When reporting excess emissions, the Permittee must report using either the Department's on-line form, which can be found at http://www.state.ak.us/dec/dawq/aqm/eeform.pdf, or if the Permittee prefers, the form contained in Section 6 of this permit. The Permittee must provide all information called for by the form that is used.

26.3 When reporting a permit deviation, the Permittee must report using either the Department's on-line form, which can be found at http://www.state.ak.us/dec/dawq/aqm/eeform.pdf, or if the Permittee prefers, the form contained in Section 6 of this permit. The Permittee must provide all information called for by the form.

26.4 When reporting excess tanker vessel opacity, also provide immediate notice by phone and submitting a copy of the excess emission report to the Valdez Marine Terminal Oversight Unit staff[1], P.O. Box 990,Valdez, AK 99686, main phone: (907) 834-6700, facsimile 834-6712.

[18 AAC 50.235(a)(2), 50.240(c), & 50.350(i), 1/18/97; and 18 AAC 50.346(a)(3), 5/3/02]

27. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.346(a)(2), 5/3/02; 18 AAC 50.110, 5/26/72; 18 AAC 50.040(e), 8/15/02]

27.1 If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to condition 26.

[1] The Department will make administrative adjustment for any unforeseen re-organization of the VMTOU

27.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of condition 27.

27.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the facility have caused or are causing a violation of condition 27; or

b. the Department notifies the Permittee that it has found a violation of condition 27.

27.4 The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of condition 27; and

d. any corrective actions taken or planned for complaints attributable to emissions from the facility.

27.5 With each facility operating report under condition 29 of Permit No. 9671-AA001, the Permittee shall include a brief summary report which must include

a. the number of complaints received;

b. the number of times the Permittee or the Department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.

27.6 The Permittee shall notify the Department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.346(a)(2) & 50.350(g) - (i), 5/3/02]

Revised Exhibit B

The following clause is deleted.

vi.	Source Nos. 17-34 Crude Oil Storage tanks	850 minutes venting in any 12 consecutive months excluding venting due to scheduled maintenance of the tanks and the vapor recovery system, equipment malfunctions and operational upsets.

Revised Exhibit C

EXHIBIT C
CONTINUOUS EMISSION AND PROCESS MONITORING REQUIREMENTS

Permittee shall install, calibrate, operate, and maintain air contaminant emissions and monitoring equipment in good working order and in accordance with manufacturer's procedures or other written documentation submitted to the Department by the permittee. Instrument siting and operation and maintenance procedures must be notified to the Department.

An alternate emission monitoring plan (AMP) may be proposed for Department approval if it can be shown to accurately ensure continuous compliance with the emission limits and permit conditions.

SOURCE	PARAMETER	MONITORING REQUIREMENTS
Power Boilers	fuel consumption	Liquid fuel and the waste gas consumption for all power boilers. Permittee may use the heat content described in the Waste Gas Incinerator section of this exhibit to characterize the waste gas burned in the power boilers
	distillate fuel sulfur content	Either analyze the fuel for sulfur content on a quarterly basis using an appropriate ASTM method or obtain an analysis of the sulfur content from the vendor for each fuel delivery.
Waste Gas Incinerators	auxiliary fuel/ waste gas	Continuous monitoring of the total amount of auxiliary fuel and the total amount of waste gas burned in the three incinerators.
	waste gas heat	Continuously monitor the heat content of the waste gas using an on-line calorimeter. The instantaneous reading will be available to vapor recovery system operators at all times. The system shall be calibrated once per quarter according to an established written procedure.
Crude Oil Storage tanks	tank pressure	Continuously monitor the pressures of each crude oil storage tank. Permittee shall perform and document annual verification of condition, and operability of all crude tank pressure recorder/controllers.

Exhibit C, Continued

PART II - Parameters to be recorded during Waste Gas Incinerator Source Testing

The following parameters must be recorded during any of the source tests on the Waste Gas Incinerators required by this permit:

1) Liquid fuel feed rate (gal/hr)
2) Waste Gas feed rate (scf/hr)
3) Waste Gas heat content (Btu/scf)
4) Exhaust gas temperature
5) Combustion Air Flow
6) Inlet and Outlet VOC concentration (if measurement required by 40 CFR 63)

Revised Exhibit D

Item 10 is revised as follows:

10. The signature of the permittee's authorized agent preceded by the statement: " I certify that I am familiar with the information contained in this report, and that to the best of my knowledge and belief such information is true, complete and accurate."

Section 5 Permit Documentation

October 7, 1997	APSC 18 AAC 50.400 Permit Revision request.
January 24, 2002	APSC request for NSPS Subpart D applicability determination on power boilers to EPA.
March 13, 2002	APSC request to discontinue visible emission surveillance on tanker vessels.
May 13, 2002	Prince William Sound Regional Citizens' (RCAC) Advisory Council letter to Tom Chapple regarding tanker vessel opacity.
September 24, 2002	APSC Updated Permit Revision Request.
October 10, 2002	APSC application retainer submission.
November 25, 2002	APSC withdrawal of a portion of the pending request.
December 13, 2002	Submission of RCAC November 27, 2002 Analysis of APSC requests.
December 30, 2002	E-mail from Brad Thomas, APSC clarifying September 24, 2002 request.
April 17, 2003	E-mail from Brad Thomas, APSC with attached mark-up preliminary permit.
April 17, 2003	E-mail from Brad Thomas, APSC with tanker vessel opacity summary.

Section 6 ADEC Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

Error! Reference source not found.
Company Name

Error! Reference source not found.
Facility Name

Reason for notification:

❑ **Excess Emissions** — *If you checked this box Fill out section 1*

❑ **Other Deviation from Permit Condition** — *If you checked this box fill out section 2*

When did you discover the Excess Emissions or Other Deviation:
Date:__/__/__ Time:__:__

Section 1. Excess Emissions

(a) Event Information (Use 24-hour clock)**:**

	START Time**:** (hr:min):	**END** Time:	**Duration**
Date: _____	_____:_____	_____:_____	_____:_____
Date: _____	_____:_____	_____:_____	_____:_____
		Total:	_____:_____

(b) Cause of Event (Check all that apply)**:**

❑ START UP ❑ UPSET CONDITION ❑ CONTROL EQUIPMENT
❑ SHUT DOWN ❑ SCHEDULED MAINTENANCE ❑ OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

(c) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device

(d) Emission Limit Potentially Exceeded

Identify each emission standard potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Identify what observation or data prompted this report. Attach additional sheets as necessary.

Permit Condition	Limit	Emissions Observed

(e) Excess Emission Reduction:

Attach a description of the measures taken to minimize and/or control emissions during the event.

(f) Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

(g) Unavoidable Emissions:

Do you intend to assert that these excess emissions were unavoidable?
❑ YES ❑ NO
Do you intend to assert the affirmative defense of 18 AAC 50.235?
❑ YES ❑ NO

Section 2. Other Permit Deviations

(a) Sources Involved:

Identify each emission source involved in the event, using the same identification number and name as in the permit. List any control device or monitoring system affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device

(b) Permit Condition Deviation:

Identify each permit condition deviation or potential deviation. Attach additional sheets as necessary.

Permit Condition	Potential Deviation

(c) Corrective Actions:

Attach a description of actions taken to correct the deviation or potential deviation and to prevent recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: Signature: Date: